ATTACHMENT C

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

1-31. (Canceled).

32. (Currently Amended) A method of synchronizing the local clocks of each of a plurality of USB devices connected to a common USB host via a USB tree so that said clocks are ~~substantially~~ in phase and at ~~substantially the same~~a common frequency, comprising:

(a) locking the local clock of each of said USB devices ~~to substantially the same frequency according to the method of claim 18;~~ comprising:

generating or designating specific signal structures for transmission in the USB data traffic;

transmitting said specific signal structures to said USB device in a predefined sequence;

monitoring USB signals local to said USB device for said specific signal structures;

generating a local reference signal at each of said USB devices from said specific signal structures; and

locking the frequency of said local clock signal at each of said USB devices to said local reference signal to a predetermined degree;

(b) determining the relative propagation delay of signals from said USB host to each of said USB devices with respect to a selected one of said USB devices ~~according to the method of measuring the propagation time of signals from a USB host to a USB device within a USB tree,~~ comprising:

designating a master USB device in said USB tree;

generating or designating specified signal structures for transmission in the USB data traffic;

transmitting said specified signal structures to said USB device in a

predefined sequence;

monitoring said USB traffic by means of said master USB device for said specified signal structures and for specified response signals from said USB device;

generating event triggering signals local to said master USB device corresponding to decoding of said specified signal structures;

generating event triggering signals local to said master USB device corresponding to decoding of response signals from said USB device;

measuring a time interval between said event triggering signals in said master USB device; and

determining a propagation time from said USB host to said USB device from said time interval, said selected one of said USB devices designated a reference USB device; and

(c) determining the relative phase of said local clock of each of said plurality of USB devices with respect to said local clock of said reference USB device ~~according to the method of determining the relative propagation delay of electrical signals or data structures between a plurality of USB devices connected to a common USB host,~~ comprising:

determining respective propagation delays between each of said USB devices;

determining the temporal adjustment or phase offset of each of said local clocks required to result in said plurality of local clocks across said USB tree being ~~substantially~~ in phase;

transmitting said temporal adjustment or phase offset from said USB host to said USB devices; and

providing phase adjustment of said local clock on each of said USB devices according to said temporal adjustment or phase offset respectively.

33. (Original) A method as claimed in claim 32, wherein each of the local clocks of at least some of said USB devices are shifted in phase by a desired amount, resulting in an array of USB devices with local clocks of known relative phases.

34. (Currently Amended) A method for synchronously triggering and thereby initiating or stopping one or more processes on a plurality of USB devices connected to a common USB host according to a predefined trigger command, comprising:

synchronizing the local clocks of each of said USB devices according to the method of claim 32;

transmitting a predetermined trigger request signal and a predetermined trigger command signal in the USB data traffic, indicative respectively of a trigger request and of said trigger command;

monitoring said USB data traffic local to each of said USB devices for said trigger request signal and for said trigger command signal;

sending an initiating trigger request signal by means of said USB host to each of said USB devices to prepare said USB devices to execute said trigger request at ~~substantially the same~~ a common time;

configuring said USB devices to respond to said initiating trigger request signal by preparing themselves to perform said processes on receipt said trigger signal;

configuring said USB host to issue said trigger command to each of said plurality of said USB;

decoding said trigger command by means of said USB devices;

configuring said USB devices to execute said processes at ~~substantially the same~~ a common time; and

whereby one or more processes within said USB devices can be initiated or stopped upon receipt of said trigger command signal from said USB host.

35. (Original) A method as claimed in claim 34, wherein said trigger request signal comprises any of the USB packet signal structures defined in the USB specification, command sequences sent to the USB device, or data sequences sent to the USB device.

36. (Original) A method as claimed in claim 34, including transmitting said trigger request signal and said trigger command signal in a predetermined sequence.

37. (Original) A method as claimed in claim 34, wherein said trigger command signal comprises any of the USB packet signal structures defined in the USB specification, command sequences sent to the USB device, or data sequences sent to the USB device.

38. (Original) A method as claimed in claim 34, wherein said local USB decoding device is a microcontroller, a microprocessor, a field programmable gate array or any other element capable of decoding data structures within said USB.

39. (Original) A method according to claim 34, wherein said trigger request signal comprises OUT tokens, IN tokens, ACK tokens, NAK tokens, STALL tokens, PRE tokens, SOF tokens, SETUP tokens, DATA0 tokens, DATA1 tokens, or programmable sequences bit patterns in the USB data packets.

40. (Original) A method according to claim 34, wherein said initiating trigger request signal comprises OUT tokens, IN tokens, ACK tokens, NAK tokens, STALL tokens, PRE tokens, SOF tokens, SETUP tokens, DATA0 tokens, DATA1 tokens, or programmable sequences bit patterns in the USB data packets.

41. (Original) A method according to claim 34, wherein said trigger command is encoded into said USB traffic using a signal protocol defined within the USB specification.

42-50. (Canceled